

Abstract

A radial flow turbine including a rotor having a plurality of vanes defining an inlet, an outlet, and a flow path therebetween. A shroud is positioned to cover at least a portion of the flow path and a housing is positioned to at least partially support the rotor for rotation about a rotational axis. The housing at least partially defines a chamber for the receipt of a flow of products of combustion. A plurality of nozzle guide vane assemblies are positioned to provide fluid communication between the chamber and the inlet. Each of the plurality of nozzle guide vane assemblies is positioned adjacent another nozzle guide vane assembly to at least partially define one of a plurality of converging flow paths. Each nozzle guide vane assembly includes a guide vane positioned between the shroud and the housing and including an aperture therethrough. A bolt engages with the shroud and extends through the aperture to sandwich the guide vane between the shroud and the housing. A resilient member having a stiffness less than the bolt cooperates with the bolt to apply a compressive force to the guide vane.